

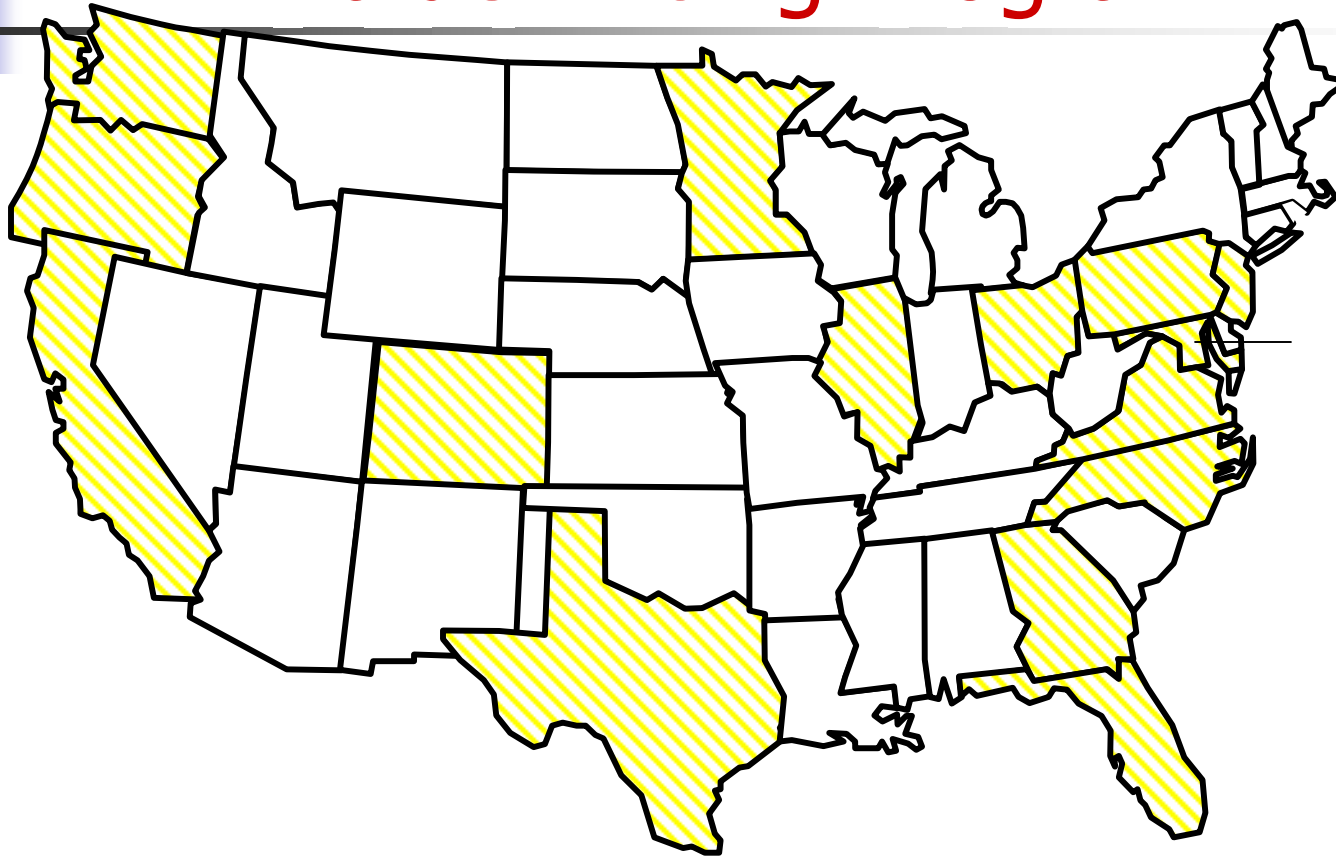


Value Pricing as a Demand Management Strategy

Patrick DeCorla-Souza, AICP
U.S. Federal Highway Administration
E-mail: patrick.decorla-souza@fhwa.dot.gov
Phone: 202-366-4076



Value Pricing Program



HOV to HOT Conversion

San Diego, I-15

- 8 miles, two reversible lanes
- Tolls vary dynamically
- Ensures free-flowing traffic



Toll Express Lanes

SR 91, CA

- Four new lanes in median, 10 miles
- Tolls are \$1.00 to \$6.25





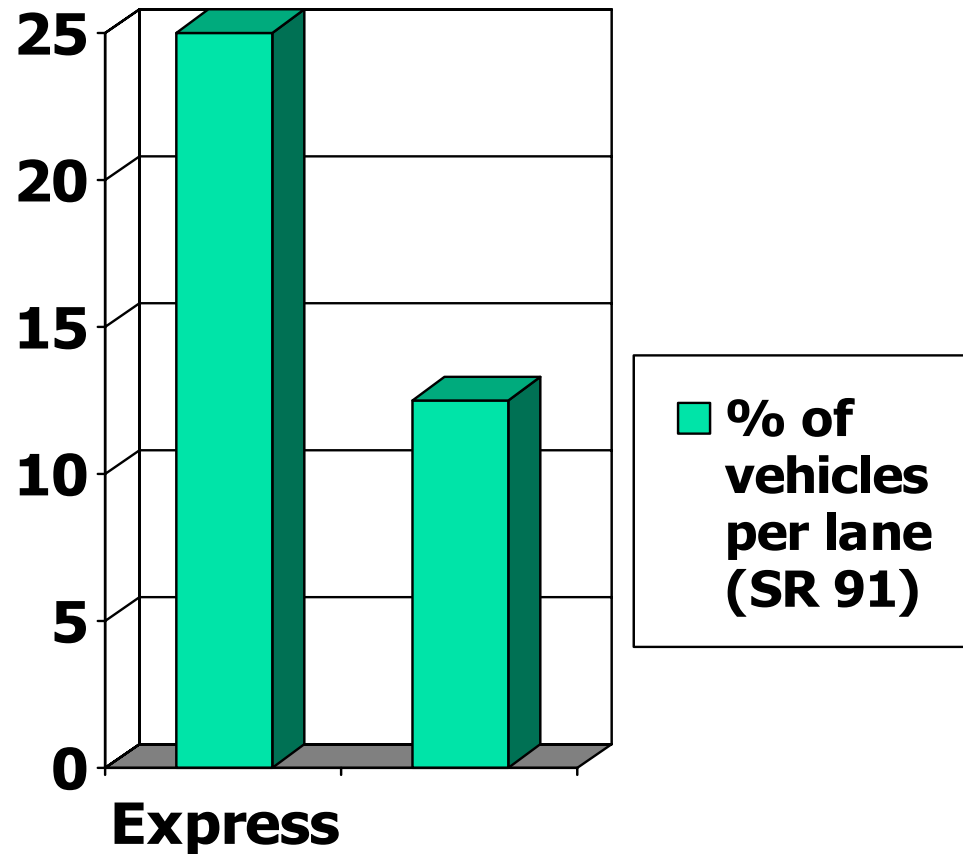
Variable Tolls on Toll Facilities

- N. J. Turnpike
- New York – New Jersey crossings
- Florida's Ft. Myers bridges
- California's San Joaquin Hills and Foothill Toll Roads

Lessons Learned: Freeway Efficiency

SR 91 Express:

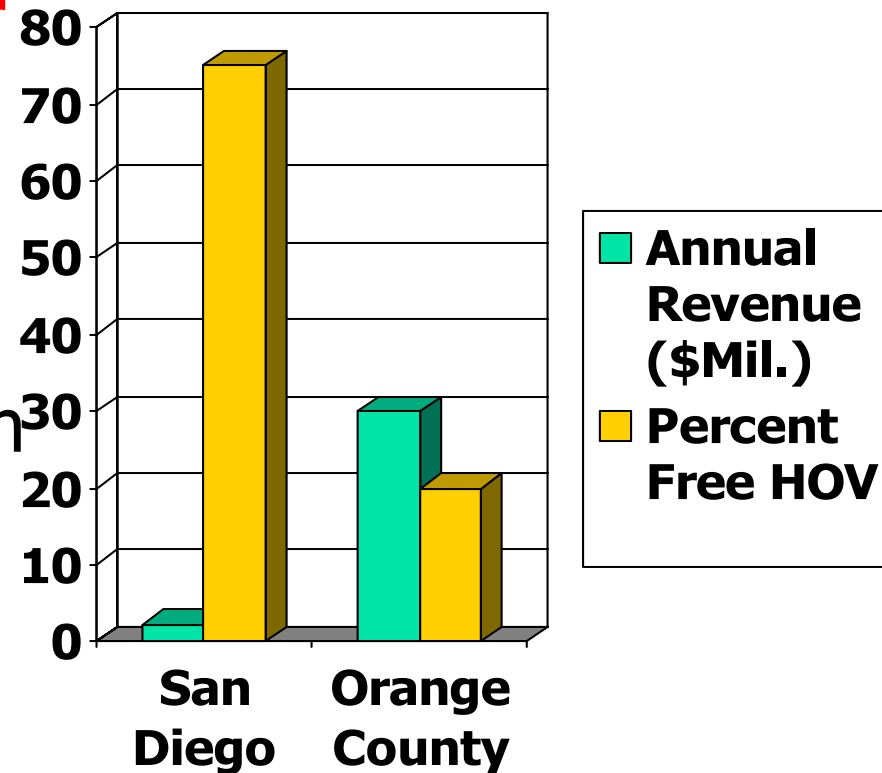
- Higher peak hour throughput per lane
- Speed 3 to 4 times higher



Lessons Learned: Financial Feasibility

Revenue vs. other public goals:

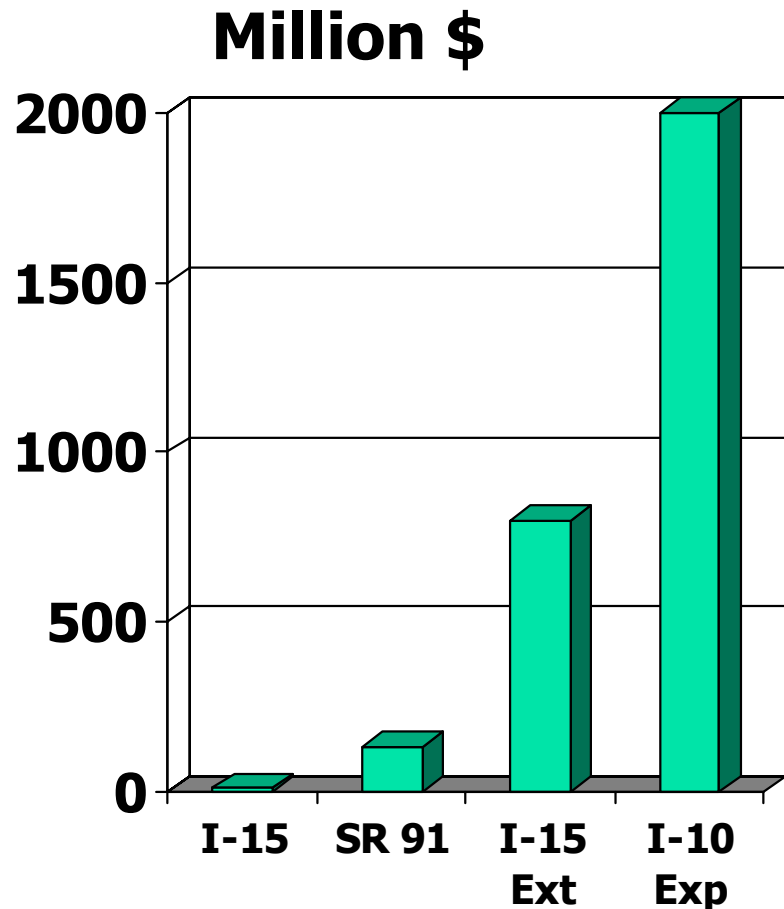
- HOV policies can reduce revenue
- More congestion in regular lanes = higher toll in express lanes



Costs in Urban Areas

Const. costs

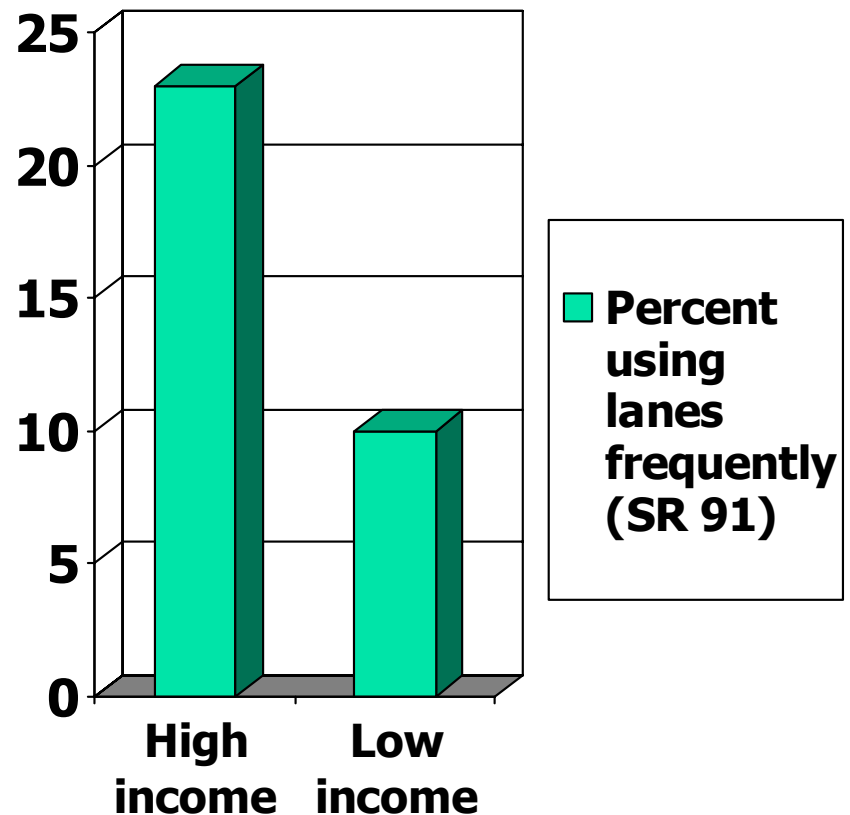
- New lane(s)
- Right-of-way
- Interchanges
- Direct access ramps
- Improvements to free lanes



Lessons Learned: Equity

Fairness to low income motorists:

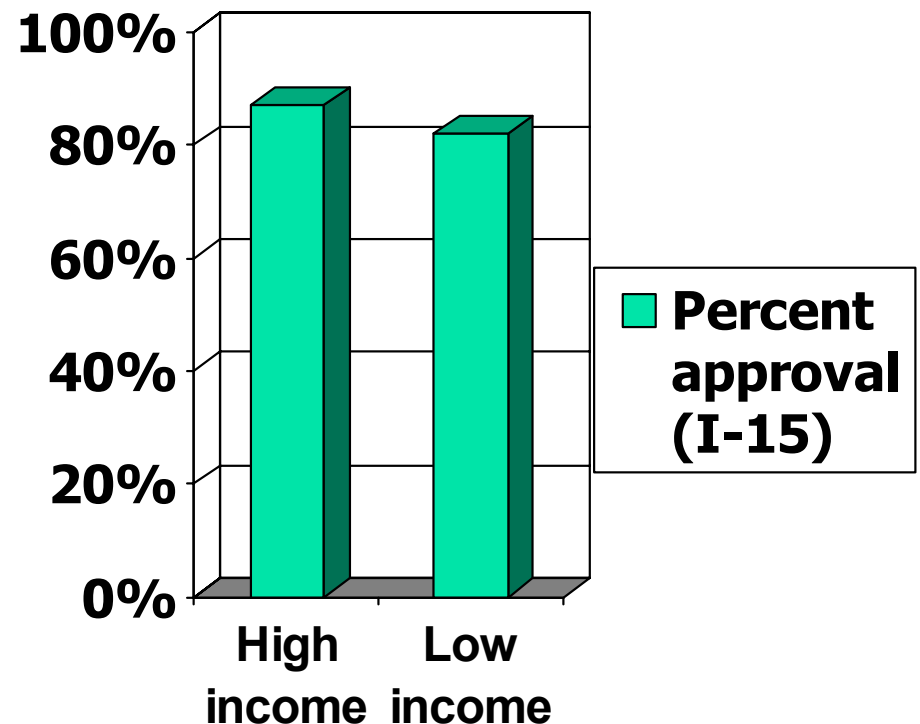
- All income groups use toll lanes
- But higher-income commuters use them more often



Lessons Learned: Public Opinion

I-15:

- 70% approval for existing HOT Lanes
- 84% favor HOT Lanes extension
- Considered “fair”





Lessons Learned: Toll Facilities

Effects of variable tolls:

- **New York**

- Reduced peak demand, shorter peak period

- **New Jersey**

- Reduced share of travel in peak

- **Florida**

- 71% shifted time of travel at least once a week



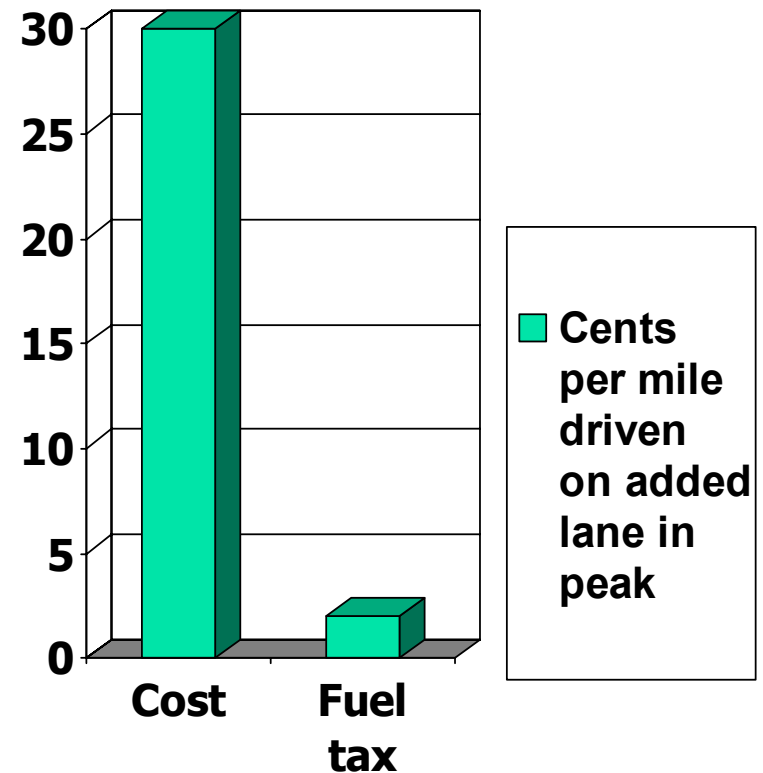
Public Resistance

- **Raising tolls in peak periods is a tough sell –**
 - Most commuters have no other option
 - Need improvements to alternative modes
 - But other agencies responsible for transit, HOV and park-and-ride

Overcoming Public Resistance

“Roads already paid for”:

- High costs for rehabilitation, reconstruction and expansion
- Fuel taxes only 2 cents per mile driven





Overcoming Public Resistance

- **Traffic diversion to neighborhoods:**
 - Reduced off-peak tolls discourage diversion
 - Increased freeway throughput with pricing
 - Improved arterial operations with added revenue
- **“Tollbooth” delays:**
 - Electronic toll collection



Overcoming Equity Concerns

- **“Not fair to provide better mobility to the wealthy”**
 - Package pricing with benefits for low-income travelers:
 - New transit, HOV and park-and-ride service
 - Toll discounts for low-income motorists
 - Credits to motorists in regular lanes (FAIR lanes)



HOT Lanes Network Concept

- Variable charges applied to HOT lane(s)
- Bus transit provided on HOT lanes
 - Direct connection to bus stations
- Carpools get free service on HOT lanes
 - Enforcement difficult, revenues lower, but better mobility and equity
- Regular lanes remain congested



Express Lanes Network Concept

- Variable charges applied to Express freeway lane(s)
- Bus transit provided on Express lanes
 - Direct connection to bus stations
- Only buses get free service on Express lanes
 - Enforcement easier, revenues higher, but reduced mobility and equity relative to HOT



FAIR Highway Network

- Variable peak service charges to manage operation of **entire** freeway
- High quality bus transit
 - includes new park-and-ride lots
- Managed arterial network
 - state-of-the art ITS improvements
- Service discounts based on income
 - address equity and traffic diversion



Administration Proposal

- Variable Toll Pricing Program
- Mainstreams road pricing
- Allows tolling on any facility
- Allows conversion of HOV to HOT
- Purpose – to manage congestion or improve air quality



Concluding Thoughts

- Road pricing benefits:
 - Revenue for infrastructure investment
 - Maximizes efficiency
 - Reliable trip time for the motorist
- Direct user payment fairer than taxes
- Not easy - requires packaging of strategies and public education